

Department of Energy

Richland Operations Office P.O. Box 550 Richland, Washington 99352

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Addressees:

SAMPLING RESULTS FROM WELL 299-W23-19 AND PATH FORWARD

Reference is made to Ecology's letter from J. A. Hedges to R. M. Yasek, ORP, "Review of Report RPP-10757, Rev. 0 and Path Forward on Well 299-W23-19," dated July 31, 2002.

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The U.S. Department of Energy (DOE) has just received the latest confirmed results from Well 299-W23-19 which is located in Waste Management Area S-SX. The results show a technetium-99 (Tc-99) concentration of 188,000 pCi/L. A summary of the sampling results for the last year is provided on the attached table provided by the Pacific Northwest National Laboratory (PNNL).

Pursuant to the referenced letter, DOE and its contractors are proceeding to install a pump in the well and begin routine pumping of the well during sampling events. The next sampling event is scheduled for March 12, 2003. Following the sampling event, water from the well will be pumped into a tanker truck and transferred to the Effluent Treatment Facility for treatment.

The actions described above and any future actions dealing with the Tc-99 groundwater plume associated with Well 299-W23-19 will be included in the 200-UP-1 Interim Record of Decision for Groundwater Operable Unit 200-UP-1. The DOE project manager will be Arlene Tortoso and the Fluor Hanford, Inc. (FHI) project manager will be Jane Borghese. DOE will be scheduling a meeting as soon as possible to meet and discuss the details of the most recent sampling event and path forward.

If you have any questions, please contact me on (509) 376-0057 or Arlene Tortoso, Waste Management Division, on (509) 373-9631.

Sincerely,

John G. Morse, Manager

Groundwater Protection Program

WMD: JGM

Attachment

cc w/attach:

J. V. Borghese, FHI

J. A. Caggiano, Ecology

D. A. Faulk, EPA

D. Goswami, Ecology

J. A. Hedges, Ecology

A. J. Knepp, CH2M

S. P. Luttrell, PNNL

Z. Maine, Ecology

D. A. Myers, CHT

J. B. Price, Ecology

Environmental Portal

Administrative Record (200-UP-1)

FY02/03 Groundwater Data for Well 299-W23-19

Sample Date	Technetium-99 (pCi/L)	Specific Conductance (uS/cm)
December 6, 2001	78,000	1,417
March 18, 2002	29,500	686
June 12, 2002	97,400	1,841
October 10, 2002	73,500	1,315
January 16, 2003	187,900	2,927

The above data, as well as additional data in the database, show that technetium-99 and specific conductance are closely related and therefore, the elevated technetium-99 concentration on January 16, 2003 is considered real. This value was obtained from a reanalysis of the sample. The first analysis was reported as 209,000 pCi/L and was loaded into HEIS, but the matrix spike for the analysis was out of specification, high by ~2.5X, indicating that the analysis is suspected of being biased high. The matrix spike for the analysis reported in the table above is within 2% of the expected value, and therefore no bias is suspected in the analytical result reported.